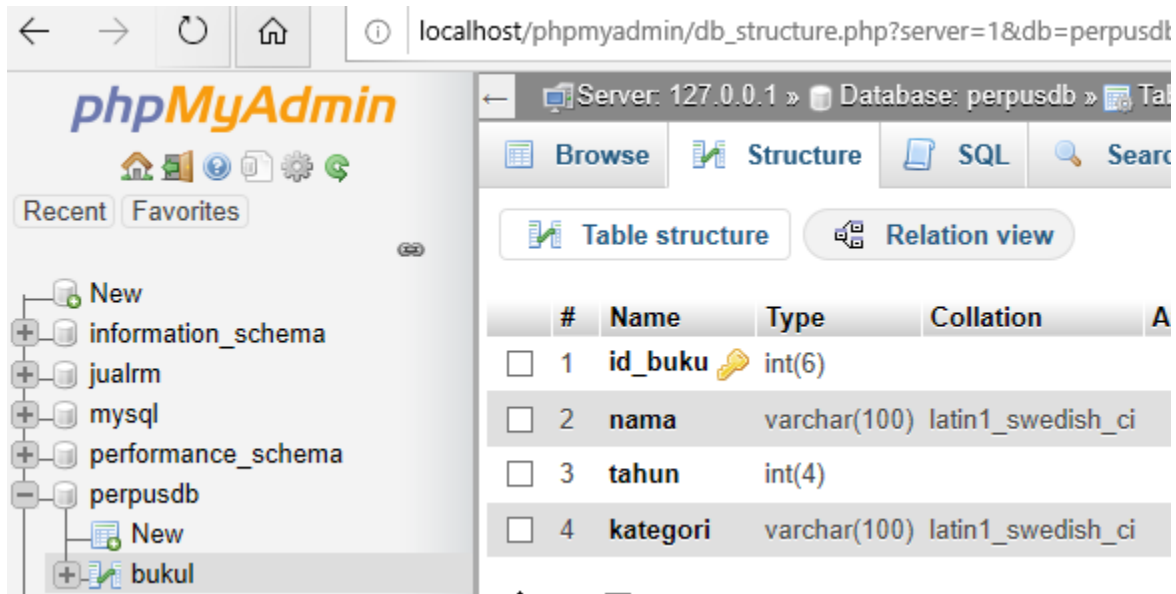


NAMA : AGUS HANAN
NIM : 177200038
KELAS : TI 6, Regular sore


DATA BASE



The screenshot shows the phpMyAdmin interface. The left sidebar displays a tree view of databases, with 'perpusdb' selected. The main panel shows the 'Table structure' view for the 'perpusdb' database. The table structure is as follows:

#	Name	Type	Collation
1	id_buku	int(6)	
2	nama	varchar(100)	latin1_swedish_ci
3	tahun	int(4)	
4	kategori	varchar(100)	latin1_swedish_ci

INPUT DATA



The screenshot shows the 'Perpustakaan Mandiri' web application. The form has the following fields and buttons:

- ID BUKU :
- Nama :
- Tahun :
- Kategori :
- Buttons: **Tambah**, **Hapus**, **Edit**, **Bersihkan**, **Keluar**
- Search section: **Cari Berdasarkan Nama Buku :** **Cari**

Below the form is a table displaying the current data in the database:

ID_BUKU	Nama	Tahun	Kategori
1	bulan	2016	IPA
2	bintang	2014	Kimia
3	komet	2019	novel
4	boloncat	2000	90
5	sapi	2016	Novel

HAPUS DATA

 — □ ×

Perpustakaan Mandiri

ID BUKU :

Tambah

Nama :

Hapus

Tahun :

Edit

Kategori :

Bersihkan


Keluar

Cari Berdasarkan Nama Buku :

Cari

ID_BUKU	Nama	Tahun	Kategori
2	bintang	2014	Kimia
3	komet	2019	novel
4	boloncat	2000	90
5	sapi	2016	Novel

EDIT DATA

 — □ ×

Perpustakaan Mandiri

ID BUKU :

Tambah

Nama :

Hapus

Tahun :

Edit

Kategori :

Bersihkan

Keluar

Cari Berdasarkan Nama Buku :

Cari

ID_BUKU	Nama	Tahun	Kategori
2	bintang	2014	Kimia
3	komet	2019	novel
4	boloncat	2000	90
5	sapu	2016	Novel

SYNTAXS PERPUS

```
/*  
 * To change this license header, choose License Headers in Project Properties.  
 * To change this template file, choose Tools | Templates  
 * and open the template in the editor.  
 */
```

```
package tugascrud;
```

```
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.ResultSet;  
import java.sql.SQLException;  
import java.util.logging.Level;  
import java.util.logging.Logger;  
import javax.swing.table.DefaultTableModel;
```

```
/**  
 *  
 * @author chaba  
 */  
public class formbuku extends javax.swing.JFrame {  
    DefaultTableModel model;  
    /**  
     * Creates new form formbuku  
     */  
    public formbuku() {  
        initComponents();  
        String []judul={"ID_BUKU","Nama","Tahun","Kategori"};  
        model = new DefaultTableModel(judul,0);  
        jTable1.setModel(model);  
    }  
}
```

```

        tampilkan();
    }

/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jLabel1 = new javax.swing.JLabel();
    jLabel2 = new javax.swing.JLabel();
    jLabel3 = new javax.swing.JLabel();
    jLabel4 = new javax.swing.JLabel();
    jLabel5 = new javax.swing.JLabel();
    Text1 = new javax.swing.JTextField();
    Text2 = new javax.swing.JTextField();
    btntam = new javax.swing.JButton();
    btnhap = new javax.swing.JButton();
    btncari = new javax.swing.JButton();
    btnkel = new javax.swing.JButton();
    jScrollPane1 = new javax.swing.JScrollPane();
    jTable1 = new javax.swing.JTable();
    Text5 = new javax.swing.JTextField();
    btncar = new javax.swing.JButton();
    jLabel6 = new javax.swing.JLabel();
    Text3 = new javax.swing.JTextField();

```

```
Text4 = new javax.swing.JTextField();
```

```
btnber = new javax.swing.JButton();
```

```
setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
```

```
setBackground(java.awt.SystemColor.controlHighlight);
```

```
jLabel1.setFont(new java.awt.Font("Times New Roman", 1, 24)); // NOI18N
```

```
jLabel1.setText("Perpustakaan Mandiri");
```

```
jLabel2.setText("ID BUKU :");
```

```
jLabel3.setText("Nama :");
```

```
jLabel4.setText("Tahun :");
```

```
jLabel5.setText("Kategori :");
```

```
Text1.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        Text1ActionPerformed(evt);  
    }  
});
```

```
Text1.addKeyListener(new java.awt.event.KeyAdapter() {  
    public void keyTyped(java.awt.event.KeyEvent evt) {  
        Text1KeyTyped(evt);  
    }  
});
```

```
btntam.setText("Tambah");
```

```
btntam.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        btntamActionPerformed(evt);  
    }  
});
```

```
btnhap.setText("Hapus");  
btnhap.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        btnhapActionPerformed(evt);  
    }  
});
```

```
btncedi.setText("Edit");  
btncedi.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        btncediActionPerformed(evt);  
    }  
});
```

```
btnkel.setText("Keluar");  
btnkel.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        btnkelActionPerformed(evt);  
    }  
});
```

```
jTable1.setModel(new javax.swing.table.DefaultTableModel(  
    new Object [][] {
```

```

        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null},
        {null, null, null, null}
    },
    new String [] {
        "Title 1", "Title 2", "Title 3", "Title 4"
    }
));
jTable1.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseClicked(java.awt.event.MouseEvent evt) {
        jTable1MouseClicked(evt);
    }
});
jScrollPane1.setViewportView(jTable1);

btncar.setText("Cari");
btncar.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btncarActionPerformed(evt);
    }
});

jLabel6.setText("Cari Berdasarkan Nama Buku :");

btnber.setText("Bersihkan");
btnber.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnberActionPerformed(evt);
    }
});

```

```
}  
});
```

```
javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());  
getContentPane().setLayout(layout);  
layout.setHorizontalGroup(  
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
        .addGroup(layout.createSequentialGroup()  
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
                .addGroup(layout.createSequentialGroup()  
                    .addGap(246, 246, 246)  
                    .addComponent(jLabel1))  
                .addGroup(layout.createSequentialGroup()  
                    .addGap(59, 59, 59)  
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)  
                        .addGroup(layout.createSequentialGroup()  
                            .addGroup(javax.swing.GroupLayout.Alignment.LEADING,  
layout.createSequentialGroup()  
                                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,  
false)  
                                    .addGroup(layout.createSequentialGroup()  
                                        .addGroup(layout.createSequentialGroup()  
                                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
                                                .addComponent(jLabel2)  
                                                .addComponent(jLabel3)  
                                                .addComponent(jLabel4)  
                                                .addGap(18, 18, 18)  
                                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
                                                .addComponent(Text1, javax.swing.GroupLayout.PREFERRED_SIZE, 134,  
javax.swing.GroupLayout.PREFERRED_SIZE)
```



```

        .addComponent(Text2, javax.swing.GroupLayout.PREFERRED_SIZE, 283,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(Text3, javax.swing.GroupLayout.PREFERRED_SIZE, 78,
javax.swing.GroupLayout.PREFERRED_SIZE)))

        .addGroup(layout.createSequentialGroup())

        .addComponent(jLabel5)

        .addGap(18, 18, 18)

        .addComponent(Text4)))

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 79,
Short.MAX_VALUE)

        .addComponent(btnber)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)

        .addComponent(btntam, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addComponent(btnhap, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addComponent(btntedi, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addComponent(btnkel, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)))

        .addComponent(jScrollPane1, javax.swing.GroupLayout.Alignment.LEADING)

        .addGroup(layout.createSequentialGroup())

        .addGap(0, 0, Short.MAX_VALUE)

        .addComponent(jLabel6)

        .addGap(18, 18, 18)

        .addComponent(Text5, javax.swing.GroupLayout.PREFERRED_SIZE, 156,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addGap(18, 18, 18)

        .addComponent(btncar))))

        .addGap(99, 99, 99))

```

```

);
layout.setVerticalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .addGap(36, 36, 36)
            .addComponent(jLabel1)
            .addGap(22, 22, 22)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel2)
                .addComponent(Text1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(btntam))
            .addGap(18, 18, 18)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                .addComponent(jLabel3)
                .addComponent(Text2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addComponent(btnhap))
            .addGap(12, 12, 12)
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addComponent(jLabel4)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                    .addComponent(btndi)
                    .addComponent(Text3, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGap(18, 18, 18)
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
                        .addComponent(jLabel5)

```

```

        .addComponent(Text4, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))

        .addGroup(layout.createSequentialGroup()

        .addGap(8, 8, 8)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

        .addComponent(btnkel)

        .addComponent(btnber))))

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 18,
Short.MAX_VALUE)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

        .addComponent(Text5, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)

        .addComponent(btncar)

        .addComponent(jLabel6))

        .addGap(18, 18, 18)

        .addComponent(jScrollPane1, javax.swing.GroupLayout.PREFERRED_SIZE, 255,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addContainerGap())

    );

    pack();
} // </editor-fold>

```

```

private void Text1ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:

}

```

```

private void btntamActionPerformed(java.awt.event.ActionEvent evt) {

try {

    // TODO add your handling code here:

```

```

        Connection cn= DriverManager.getConnection("jdbc:mysql://localhost:3306/perpusdb","root","");

        cn.createStatement().executeUpdate("insert into bukul
values"+"("+"+Text1.getText()+"", "+"+Text2.getText()+"", "+"+Text3.getText()+"", "+"+Text4.getText()+"")");

        tampilkan();

        reset();
    } catch (SQLException ex) {

        Logger.getLogger(formbuku.class.getName()).log(Level.SEVERE, null, ex);
    }
}

```

```

private void Text1KeyTyped(java.awt.event.KeyEvent evt) {

    // TODO add your handling code here:

    if (Text1.getText().length() == 6){

        evt.consume();

    }

}

```

```

private void btnediActionPerformed(java.awt.event.ActionEvent evt) {

    try {

        // TODO add your handling code here:

        Connection cn= DriverManager.getConnection("jdbc:mysql://localhost:3306/perpusdb","root","");

        cn.createStatement().executeUpdate("update bukul set nama='"+Text2.getText()+"",
tahun='"+Text3.getText()+"", kategori='"+Text4.getText()+"' where id_buku='"+Text1.getText()+"'");

        tampilkan();

        reset();

    } catch (SQLException ex) {

        Logger.getLogger(formbuku.class.getName()).log(Level.SEVERE, null, ex);
    }

}

```

```
}
```

```
private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {
```

```
    // TODO add your handling code here:
```

```
    int i = jTable1.getSelectedRow();
```

```
    if(i>-1){
```

```
        Text1.setText(model.getValueAt(i, 0).toString());
```

```
        Text2.setText(model.getValueAt(i, 1).toString());
```

```
        Text3.setText(model.getValueAt(i, 2).toString());
```

```
        Text4.setText(model.getValueAt(i, 3).toString());
```

```
    }
```

```
}
```

```
private void btnberActionPerformed(java.awt.event.ActionEvent evt) {
```

```
    // TODO add your handling code here:
```

```
    reset();
```

```
    tampilkan();
```

```
}
```

```
private void btnhapActionPerformed(java.awt.event.ActionEvent evt) {
```

```
try {
```

```
    // TODO add your handling code here:
```

```
    Connection cn= DriverManager.getConnection("jdbc:mysql://localhost:3306/perpusdb","root","");
```

```
    cn.createStatement().executeUpdate("delete from bukul where id_buku='"+Text1.getText()+"'");
```

```
    tampilkan();
```

```
    reset();
```

```
} catch (SQLException ex) {
```

```
    Logger.getLogger(formbuku.class.getName()).log(Level.SEVERE, null, ex);
```

```
}  
}
```

```
private void btnkelActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
    System.exit(0);  
}
```

```
private void btncarActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
    int row = jTable1.getRowCount();  
    for(int a=0;a<row;a++){  
        model.removeRow(0);  
    }  
    try {  
        Connection cn= DriverManager.getConnection("jdbc:mysql://localhost:3306/perpusdb","root","");  
        ResultSet rs = cn.createStatement().executeQuery("select * from bukul where  
nama='"+Text5.getText()+"'");  
        while(rs.next()){  
            String data[]={rs.getString(1),rs.getString(2),rs.getString(3),rs.getString(4)};  
            model.addRow(data);  
        }  
    } catch (SQLException ex) {  
        Logger.getLogger(formbuku.class.getName()).log(Level.SEVERE, null, ex);  
    }  
}  
  
/**  
 * @param args the command line arguments
```

```

*/
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and feel.
    * For details see http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {
        java.util.logging.Logger.getLogger(formbuku.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(formbuku.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(formbuku.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(formbuku.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);
    }
}
//</editor-fold>

```

```
/* Create and display the form */  
java.awt.EventQueue.invokeLater(new Runnable() {  
    public void run() {  
        new formbuku().setVisible(true);  
    }  
});  
}
```

```
// Variables declaration - do not modify  
private javax.swing.JTextField Text1;  
private javax.swing.JTextField Text2;  
private javax.swing.JTextField Text3;  
private javax.swing.JTextField Text4;  
private javax.swing.JTextField Text5;  
private javax.swing.JButton btnber;  
private javax.swing.JButton btncar;  
private javax.swing.JButton btnedi;  
private javax.swing.JButton btnhap;  
private javax.swing.JButton btnkel;  
private javax.swing.JButton btntam;  
private javax.swing.JLabel jLabel1;  
private javax.swing.JLabel jLabel2;  
private javax.swing.JLabel jLabel3;  
private javax.swing.JLabel jLabel4;  
private javax.swing.JLabel jLabel5;  
private javax.swing.JLabel jLabel6;  
private javax.swing.JScrollPane jScrollPane1;  
private javax.swing.JTable jTable1;  
// End of variables declaration
```



```

private void tampilkan() {
    int row = jTable1.getRowCount();
    for(int a=0;a<row;a++){
        model.removeRow(0);
    }
    try {
        Connection cn= DriverManager.getConnection("jdbc:mysql://localhost:3306/perpusdb","root","");
        ResultSet rs = cn.createStatement().executeQuery("select * from buku");
        while(rs.next()){
            String data[]={rs.getString(1),rs.getString(2),rs.getString(3),rs.getString(4)};
            model.addRow(data);
        }
    } catch (SQLException ex) {
        Logger.getLogger(formbuku.class.getName()).log(Level.SEVERE, null, ex);
    }
}

private void reset(){
    Text1.setText("");
    Text2.setText("");
    Text3.setText("");
    Text4.setText("");
    Text5.setText("");
}
}

```